

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095780 A1

(51) International Patent Classification⁷:

F02M 25/07

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/SE2005/000460

(22) International Filing Date: 31 March 2005 (31.03.2005)

(25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data:

0400857-9 31 March 2004 (31.03.2004) SE

(71) Applicant (*for all designated States except US*): SCANIA CV AB (PUBL) [SE/SE]; S-151 87 Södertälje (SE).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): PELZ, Magnus [SE/SE]; Höstvägen 5, S-146 54 Tullinge (SE). SKOG, Henrik [SE/SE]; Stålbamravägen 3 B, S-151 47 Södertälje (SE). SARBY, Håkan [SE/SE]; Kynäsvägen 3 B, S-141 42 Huddinge (SE).

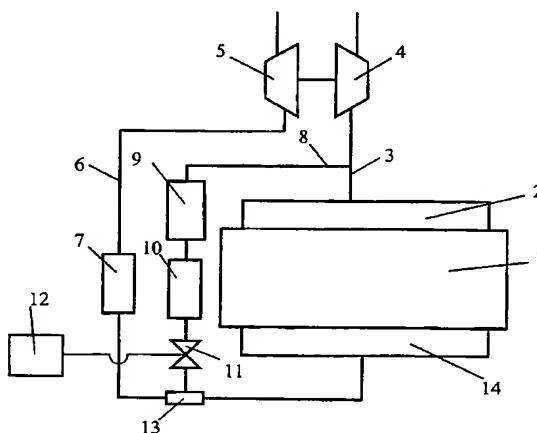
(74) Agent: FORSELL, Hans; Scania CV AB, Patents, S-151 87 Södertälje (SE).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ARRANGEMENT FOR RECIRCULATION OF EXHAUST GASES OF A SUPER-CHARGED INTERNAL COMBUSTION ENGINE



WO 2005/095780 A1

(57) Abstract: The present invention relates to an arrangement for recirculation of exhaust gases in a supercharged combustion engine (1). The arrangement comprises an exhaust line (3) intended to lead exhaust gases out from the combustion engine (1), an inlet line (6) intended to lead air at above atmospheric pressure to the combustion engine (1), a return line (8) which comprises a connection to the exhaust line (3) and a connection to the inlet line (6), so that via the return line (8) it is possible to recirculate exhaust gases from the exhaust line (3) to the inlet line (6). The arrangement comprises a first cooler (10) incorporated in the return line (8) for cooling the exhaust gases in the return line (8) before they are mixed with the air in the inlet line (6). The exhaust gases in the first cooler (10) are cooled by a first medium which is at a temperature substantially corresponding to the temperature of the surroundings.